

The Afrotropical Species Assigned to *Terellia* R.D. (Diptera: Tephritidae)

A. Freidberg

Department of Zoology, George S. Wise Faculty of Life Sciences, Tel Aviv University, Tel Aviv, Israel. Present Address: Department of Entomology, NHB 169, Smithsonian Institution, Washington, D. C. 20560.

ABSTRACT

None of the Afrotropical species assigned to *Terellia* Robineau-Desvoidy belongs to that genus. The following new combinations are made: *Terellia nigrofemorata* Munro and *Terellia taeniaptera* Bezzi are transferred to *Stephanotrypeta* Hendel; *Terellia complanata* Munro and *Trypeta planiscutellata* Becker are transferred to *Hyalotephritis* n. gen., the latter as the type-species; *Terellia planiscutellata* Becker var. *australis* Bezzi (= *Terellia australis* Bezzi) is transferred to *Tephritites* n. gen., as type- and only included species; *Terellia xanthochaeta* Munro is transferred to *Trupanea* Schrank. *Stephanotrypeta vittata* n. sp. is described, and a key to the four known species of the genus is given. *Terpnodesma* Munro becomes a junior synonym of *Stephanotrypeta* (n. syn.). A lectotype is designated for *S. taeniaptera*.

Terellia was proposed by Robineau-Desvoidy (1830) for *palpata* Robineau-Desvoidy and *luteola* Robineau-Desvoidy. Both of these species were later found to be conspecific with *serratulae* Linnaeus, an older name (Becker, 1905; Hendel, 1927). While revising the Terelliinae of the world, I have confirmed that the Palaearctic species assigned to *Terellia* (e.g. Hendel, 1927) form a monophyletic group (evidence to be elaborated in greater detail elsewhere) and belong to this genus or to the closely related *Orellia*. Among other features, specimens of these species are characterized by the inclinate posterior upper fronto-orbital bristle.

None of the Afrotropical species assigned to *Terellia* is congeneric with its type-species or even belongs to the subfamily Terelliinae. This is easily revealed by their reclinate posterior upper fronto-orbital bristles. Munro (1967) mentioned the incorrect placement of the Afrotropical species in *Terellia*; however, in the Afrotropical catalog (Cogan and Munro, in press) the same species are still being listed under *Terellia*. Munro (1929) presented a key to the six Afrotropical species assigned to

Terellia: *australis*, *complanata*, *hysia*, *nigrofemorata*, *taeniaptera* and *xanthochaeta*. Of these, *Trypeta hysia* Walker was later stated by Munro (in litt.) to belong to the Otitidae, and *Terellia taeniaptera* Bezzi was transferred to, and designated as, the type-species of *Terpnodesma* Munro (1956). The latter species as well as the other four species are treated herein and are assigned to the proper genera (two are here described as new) and subfamilies.

Subfamily Aciurinae

Stephanotrypeta Hendel

Stephanotrypeta Hendel, 1931: 8. Type-species: *Stephanotrypeta brevicosta* Hendel, by monotypy. —Munro, 1947: 88, 219 (key, discussion). *Terpnodesma* Munro, 1956: 469. [New synonym.]

Hendel (1931) erected *Stephanotrypeta* and placed it in the subfamily Trypetinae because of the relatively short 6th abdominal tergum of the female (as compared with the 5th) and the banded wing pattern. Munro (1947) transferred *Stephanotrypeta* to the Aciurinae, a subfamily that he revised for the Afrotropical Region.

Munro (1956) proposed *Terpnodesma* for *Terellia taeniptera* Bezzi, and placed it in the subfamily Tephritinae. He stated, however, that the correct placement of *Terpnodesma* must await further study. Munro (1929: 7) described *Terellia nigrofemorata*, which has never been recorded since. After studying specimens of these species, as well as of a related, undescribed species, I have concluded that all four species are congeneric. The unusual character of *S. brevicosta*, the costa reaching r_{4+5} , is shared also by *S. nigrofemorata* and is not considered to be of generic significance.

The generic characterization given by Hendel (1931) and Munro (1956) is sufficient and will not be repeated. However, the subfamilial placement of *Stephanotrypeta* requires a comment. While some Aciurinae have whitish, lanceolate, postorbital bristles, a character of Tephritinae, very rarely do they have the posterior upper orbital bristle lanceolate. *Stephanotrypeta* has lanceolate post-orbitals and 2 dark and acuminate upper orbitals; and therefore can hardly be included in the Tephritinae. The wing pattern is neither typical of the Tephritinae nor of the Aciurinae. The absence of distinct scapular bristles in this genus makes its inclusion in the Trypetinae unwarranted. The relative length of the 6th tergum of the female was found to be somewhat variable inter- and intraspecific-

ally. Even if the 6th tergum were only half the length of the 5th, as stated by Hendel (1931), this character cannot be considered a conclusive factor in subfamilial assignment of this or other genera. Although females of most trypetines have the 6th tergum shorter than the 5th, and most tephritines have it as long or longer, there are many exceptions in both subfamilies. In the Aciurinae the length of the 6th tergum varies from less than to greater than the length of the 5th.

The best-known character to define an aciurine is probably a biological one. All known hosts of Aciurinae are either Labiatae, Acanthaceae or Verbenaceae (*Trirhithromyia marshali* Bezzi (Schistopterinae) is the only known example of a non-aciurine species breeding in plants of one of these families (Acanthaceae)). The record of specimens of *S. brevicosta* from *Lantana* (Verbenaceae), although not being a rearing record, is significant, therefore, in supporting the inclusion of *Stephanotrypeta* in the Aciurinae. Within the Aciurinae *Stephanotrypeta* may fall within the platensina group (Munro, 1947) or, if the hosts are indeed Verbenaceae, it could perhaps be placed in Munro's "Group IV", together with *Munroella* and other genera, which have a similar tendency for banded wing patterns.

The Aciurinae are restricted to the Old World, where they are abundant in the tropics, mainly in the Afrotropical Region.

Key to the species of *Stephanotrypeta*

1. Costa reaching end of r_{4+5} ; last section of m attenuated toward apex; r_{4+5} and m divergent toward apex; apex of cell R_5 hyaline 2
- Costa reaching end of m; last section of m not attenuated; r_{4+5} and m parallel or convergent apically; apex of cell R_5 brown 3
2. Mesonotum with distinct but pale, partly fused, brown, dorsocentral vittae; femora mostly yellow, hind femur, except base and apex, black; 2 longest bands of wing convergent posteriorly; stigma about 3 times as long as wide, mainly yellow, except for brown base and apex; aedeagus with apical funnel-like structure, without cornuti (fig. 4); 'oviscape with coarse whitish hairs' *S. brevicosta* Hendel
- Mesonotum uniformly gray, without brown vittae; femora, except base and apex, mainly black; 2 longest bands of wing parallel; stigma about 2 times as long as wide, mainly brown; aedeagus not known; oviscape mainly with fine brown hairs, with slight whitish hairs at base *S. nigrofemorata* (Munro)
3. Mesonotum with two distinct, brown, dorsocentral vittae; arisal hairs shorter than basal width of arista (fig. 6); surstylus distinctly produced into curved, posterior flaps (fig. 3); aedeagus more sclerotized (fig. 5); oviscape with white pubescence on basal $\frac{1}{2}$ - $\frac{2}{3}$ *S. vittata* Freidberg, n. sp.
- Mesonotum uniformly gray; arisal hairs as long as, or slightly longer than, basal

width of arista (fig. 7); surstylus not produced into distinct posterior flaps (fig. 2); aedeagus less sclerotized; dorsal side of oviscape at most with slight white pubescence at base*S. taeniptera* (Bezzi)

Stephanotrypeta brevicosta Hendel

Stephanotrypeta brevicosta Hendel, 1931: 8, Pl. 1, figs. 4, 5.—Munro, 1947: 219.

This species was originally described from Egypt (a male and female), and has not been recorded since. Three males from Kenya—two caught on *Lantana*, Nairobi, VI.37, Van S. (?=Van Sommern), and the other from Kajiado, 6.I.1972, A. Freidberg—extend the range of this species to east Africa and provide the only indication for the hosts of species of *Stephanotrypeta*. The preapical spot in the wing of the male from Kajiado is not connected to the transverse band, but this is only intraspecific variation. The 9th tergum is similar to that of *S. vittata* in posterior view but differs in lateral view, being narrower and almost equally wide throughout its height (fig. 1). The aedeagus has an apical funnel-like structure (fig. 4), but no cornuti. Females were not available for study.

Stephanotrypeta nigrofemorata (Munro),
new combination

Terellia nigrofemorata Munro, 1929: 9, Pl. 1, fig. 2.
“*Terellia*” *nigrofemorata*, Munro, 1967: 16.

This species was described and is thus far known from a single female that I have seen from South West Africa. The femora are mainly black, and the wing pattern is distinctive too (see Munro's figure and the above key). The costa reaches r_{4+5} , not m as shown in Munro's figure.

Stephanotrypeta taeniptera (Bezzi),
new combination

Terellia taeniptera Bezzi, 1923: 581; 1924a: 506,
Pl. 13, fig. 52; 1924b: 118.—Munro, 1929: 7.

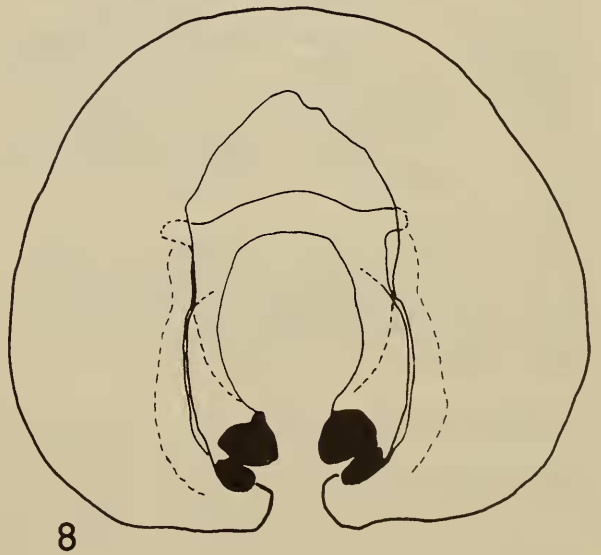
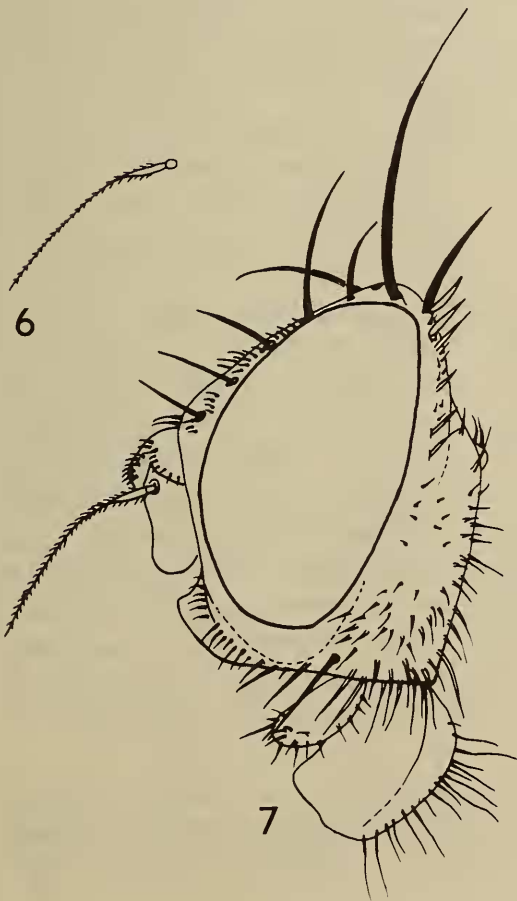
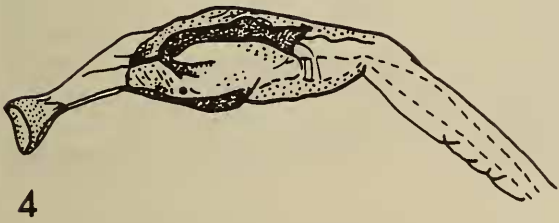
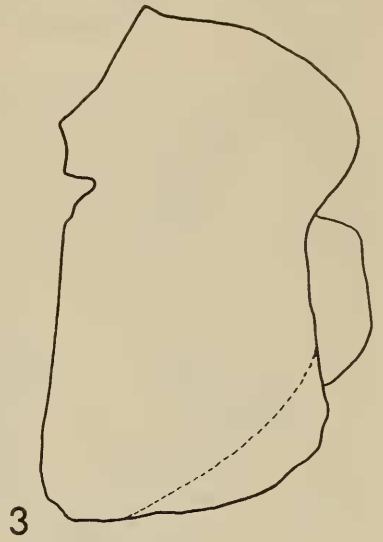
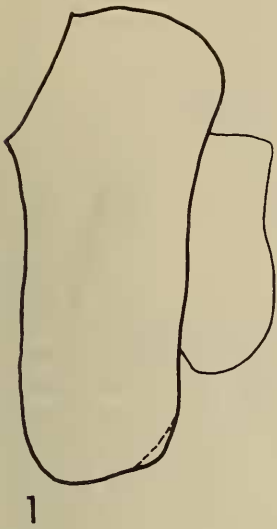
Terpnodesma taeniptera (Bezzi): Munro, 1956:
469, figs. 2, 3; 1966: 3.

This was the first Afrotropical species to be assigned to *Terellia*, and later it was

designated as the type-species of *Terpnodesma*. Bezzi (1923) recorded a female from Madagascar and compared it to a male from Transvaal, on which he based his (1924a) more detailed description. However, the species dates from 1923, not 1924 (as cited by Munro, 1956), despite the heading “*Terellia taeniptera* sp. nov.” for the 1924a description. Bezzi (1924a) stated: “One specimen from Pretoria, August 1916 (H. K. Munro); but the species is known also from East Africa and even from Madagascar”. Munro (1956) said: “The type, a male, in the South African National Collection of Insects, Pretoria, is from Barberton, August 1913, L. S. Hulley (not from Pretoria)”. I have seen a male which is labeled: “Barberton, Aug 1913, LSH [?=L. S. Hulley], H. K. Munro/*Terellia taeniptera* n. sp., t [?=type] ♂”, and also the female recorded by Bezzi (1923) from Madagascar. The female is labeled: “*Terellia taeniptera* Bezzi, Type ♀”, but it is a different species than the male (see also record under *S. vittata* n. sp.).

Although Bezzi (1923) referred to a male and female in the original description (the female is deposited in the Museum Civico Storia Naturale, Milan), he did not designate a type specimen, and both specimens referred to must be considered as syntypes. In a recent letter from Munro (23 October 1979) he confirms: “There is only the single type of *T. taeniptera* the only specimen of the species that Bezzi ever had from me. It is from Barberton, 1913.” Based on this statement, I can only conclude that Bezzi erred in citing the label data for the type specimen. The correct data were given above. Munro stated that this specimen is the “type”, but as he did not formally designate this specimen as the lectotype, I am doing so here. The

Figs. 1–8, *Stephanotrypeta* spp.: 1, *S. brevicosta*, male, 9th tergum, lateral view; 2, *S. taeniptera*, male, 9th tergum, lateral view; 3, *S. vittata*, male, 9th tergum, lateral view; 4, *S. brevicosta*, aedeagus; 5, *S. vittata*, aedeagus; 6, *S. vittata*, arista; 7, *S. taeniptera*, head, lateral view; 8, *S. vittata*, male, 9th tergum, posterior view.



lectotype is deposited in the Plant Protection Research Institute, Pretoria, South Africa.

I have studied specimens from South Africa, Rhodesia, Kenya and Uganda. The species is distinguished from the other congeners by the characters given in the key. Additional descriptive remarks are: The arista is not bare, as stated by Bezzi, but pubescent, as in fig. 7. Furthermore, there are 2 mesopleural bristles, not one, as stated by Bezzi (sockets of 3 missing bristles are visible in the lectotype). The legs are usually completely yellow; in one specimen the middle and hind femora are somewhat blackish. The wing and aedeagus were illustrated by Munro (1956). Vein r_{4+5} often with several setulae along distal section, in addition to setulae at node. The 9th tergum of the male is illustrated in fig. 2. The 6th tergum of the female is half to about as long as the 5th. Oviscape somewhat shorter than combined length of last three terga, with pubescence entirely or mainly fine and brown, coarser and whitish only ventrally at base, rarely with some whitish pubescence dorsally at base.

Material examined: Uganda: Mnkole, Mbarara, 22.IV.1968, P. J. Spangler (1♂, 1♀). Kenya: Tsavo, 11–12.I.1972, A. Freidberg (1♂). Rhodesia: S. Rhodesia, Shangani, De Beer's Ranch, V.1932, Miss A. Mackie (1♀). South Africa: Pretoria, 12.III.1926, H. K. Munro (1♂), 13.II.1972, A. Freidberg (3♂); Pretoria, Roodeplaat, XI.1960, J. Bot (1♂); Kaalfontein, Pretoria Dist., 19.IV.1950, A. L. Capener (1♀); Irene, Transvaal, 24.II.1952, H. K. Munro (1♀), 2.III.1952, H. K. Munro (1♂, 1♀).

I have not verified records from Zaire, Burundi and Tanzania. Tanzanian specimens, determined as this species (Munro, 1966), belong to *S. vittata* n. sp.

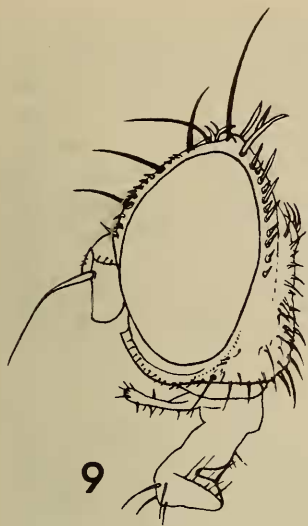
Stephanotrypeta vittata Freidberg, new species

This species is similar to *S. taeniaptera* but differs in the following characters: Arista with

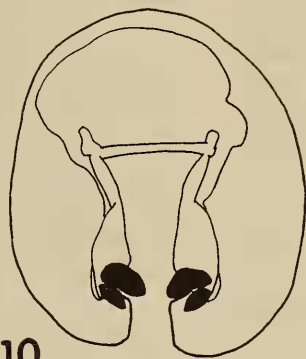
shorter pubescence (fig. 6). Mesonotum with two brown vittae that start at the anterior border, extend over the insertion of the dorsocentral bristles, converging slightly, and terminate a little behind the insertion of the prescutellar bristles; a faint and shorter median vitta is more or less distinct at the anterior part of mesonotum. No such vittae are present on mesonotum of *S. taeniaptera*. The dark spots at the insertion of the scutellar bristles are smaller. Legs mainly yellow, forefemur posterodorsally with a blackish longitudinal stripe, middle and hind femora with more or less distinct blackish basal and preapical annuli. Wing: r_{4+5} with setulae only at node; the pattern and venation are very similar in the two species but may show small significant differences if large enough series of specimens are studied. The 9th tergum (fig. 8) differs in having the surstyli distinctly produced into flattened, curved posterior processes, thus it broadens ventrally in side view (fig. 3), while in *S. taeniaptera* it tapers ventrally (fig. 2). The aedeagus (fig. 5) is somewhat more sclerotized but otherwise is very similar to that of *S. taeniaptera* (compare Munro, 1956, fig. 3). The pubescence of the oviscape is coarse and white on the basal $\frac{1}{2}$ – $\frac{2}{3}$, fine and brown otherwise, whereas it is entirely or almost entirely brown in *S. taeniaptera*. Length of body: ♂: 4.3–4.6 mm, ♀: 4.5–6.0 mm, of wing: 3.7–4.3 mm, of oviscape (dorsal side): 0.8–1.3 mm.

Material examined: Holotype, ♂, allotype, ♀, and 4♂ paratypes, Kenya, Tsavo, 11–12.I.1972, A. Freidberg. Additional paratypes: Kenya, Ukunda, 25.I.1968, K. V. Krombein (1♂); 20 mi S. Mombasa, 23–25.I.1968, Malaise trap, Krombein & Spangler (1♂). Tanzania: Makoa, 10.IV.1959, E. Lindner (1♂, 2♀), determined as *Terpnodesma taeniaptera* (Bezzi) by H. K. Munro in 1966. Aden: Aden Prot., Wadi Natid, Kirsh, ca 2300 ft, 8.XII.1937, H. Scott & E. B. Britton (1♀); West Aden Prot., Jebel Jihaf, ca 7000 ft, X.1937, H. Scott & E. B. Britton (1♀). Saudi Arabia: 18.30N 41.45E, Nr. Muhail, and 18.18N 41.50E, 22.XII.71 (4♂). Madagascar: Andrabomana, 1901, Ch. Alluaud (1♀), determined: "*Terrellia taeniaptera* Bezzi/type ♀" (Bezzi's handwriting on red paper). The Madagascan specimen, which was described by Bezzi in 1923, was misidentified (see also remark in this paper under *S. taeniaptera*). The holotype and some paratypes are

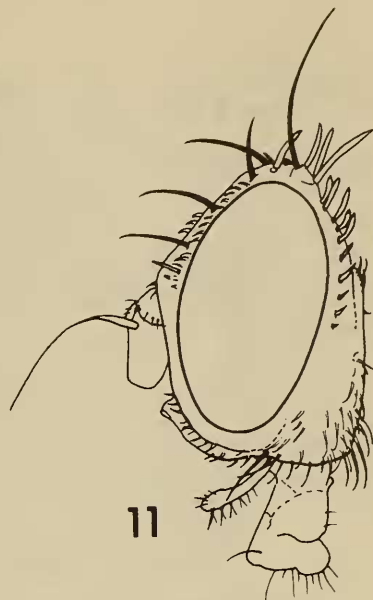
Figs. 9–15, *Hyalotephritis* spp.: 9, *H. planiscutellata*, head, lateral view; 10, *H. complanata*, male, 9th tergum, posterior view; 11, *H. complanata*, head, lateral view; 12, *H. planiscutellata*, aedeagus; 13, *H. complanata*, aedeagus; 14, *H. planiscutellata*: a, aculeus, b, enlarged tip of aculeus; 15, *H. complanata*: a, aculeus, b, enlarged tip of aculeus.



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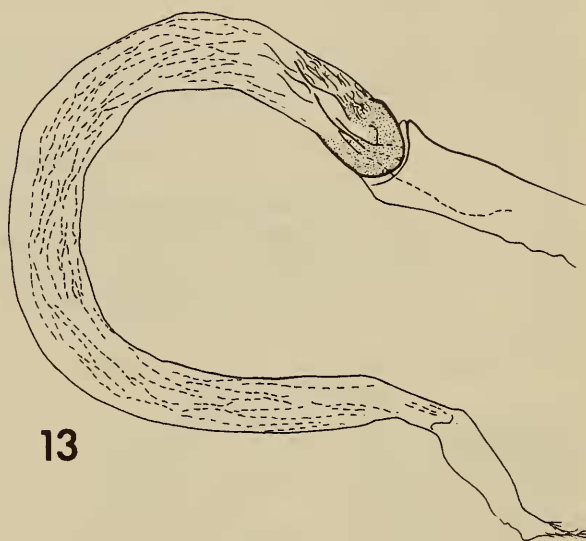
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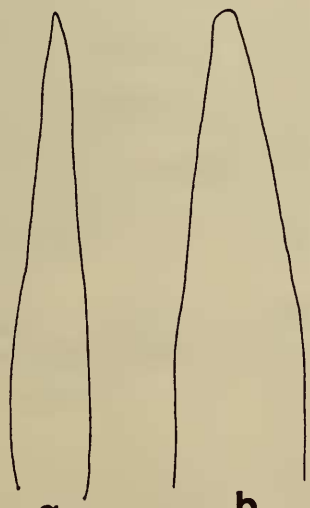
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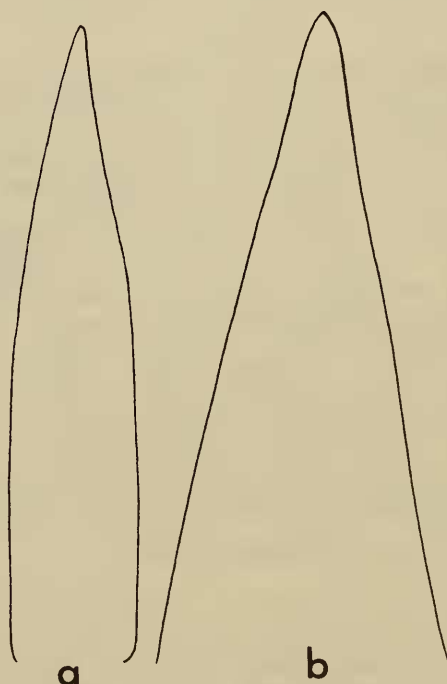
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deposited in the Department of Zoology, Tel Aviv University, Israel. Paratypes are also deposited in the British Museum (Natural History), London; National Museum of Natural History, Washington, D. C.; Museo Civico Storia Naturale, Milan; and Staatliches Museum für Naturkunde, Ludwigsburg.

Etymology: The specific epithet *vittata* is derived from the Latin noun, *vitta*, meaning bands or stripes, referring to the banded mesonotum.

Subfamily Tephritinae

Hyalotephritis Freidberg, new genus

Type-species: *Trypeta planiscutellata* Becker, by present designation.

Diagnosis: Head distinctly higher than long, oval; frontal stripe pubescent; fronto-facial angle 125°–135°.

usually rounded, occasionally somewhat angular; arista bare or almost bare; proboscis capitate; 2 upper, 3 lower fronto-orbital bristles, posterior upper and anterior lower bristles white and lanceolate, the latter bristle sometimes difficult to detect or missing; apical scutellars 0.5–0.6 as long as basals; wing entirely hyaline, with stigma sometimes yellowish, with pale veins; vein r_{4+5} bare; oviscape tapering, almost triangular; 9th tergum of male oval, with broad surstyli; aedeagus elongate, with slight sclerotization at base, followed by what appears to be pubescence.

The type-species, *planiscutellata*, has been included in *Tephritis* (e.g. Hendel, 1927). In *Tephritis*, however, the head is relatively longer and lower, more angular, fronto-facial angle usually about 100°, only 2 lower fronto-orbital bristles, wing pattern present and the aedeagus less attenuated, more sclerotized and lacking pubescence.

Key to species of *Hyalotephritis*

1. Head height–length ratio averaging 1.30; aedeagus relatively shorter, sclerotization and pubescence occupying greater part (fig. 12) *H. planiscutellata* (Becker)
- Head height–length ratio averaging 1.47; aedeagus relatively longer, sclerotization and pubescence occupying smaller part (fig. 13) *H. complanata* (Munro)

Hyalotephritis planiscutellata (Becker),
new combination

Trypeta planiscutellata Becker, 1903: 136.
Terellia planiscutellata (Becker), Efflatoun, 1924:
80, Pl. 3, fig. 4.
Tephritis planiscutellata (Becker), Hendel, 1927:
193.—Munro, 1955: 425.—Kugler and Freidberg,
1975: 66.

This species was described from Egypt and recorded also from Israel and Ethiopia. I have studied numerous specimens from Israel (deposited in the Department of Zoology, Tel Aviv University), as well as 2♂ from Egypt, Al Fayyun, 24.X.1966, J. G. Rozen (deposited in National Museum of Natural History, Washington). The head, aedeagus and aculeus are illustrated in figs. 9, 12, and 14 respectively. The only known host plant of this species is *Conyza dioscoridis* (L.) Desf. (Compositae). Efflatoun (1925, 1927) described the immature stages.

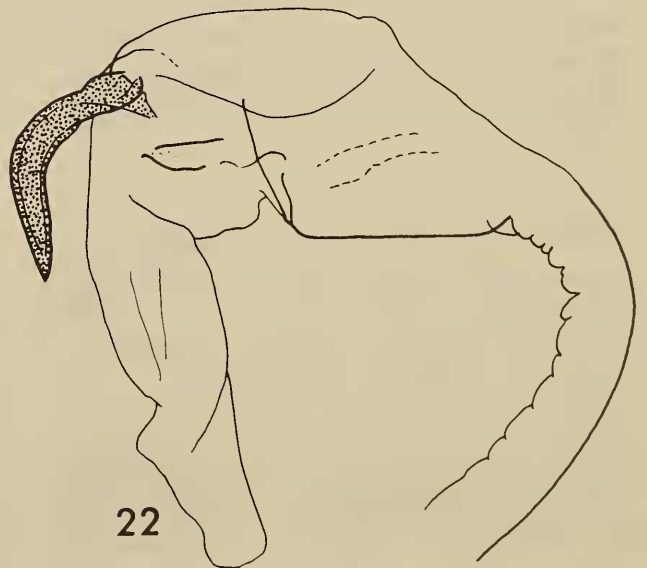
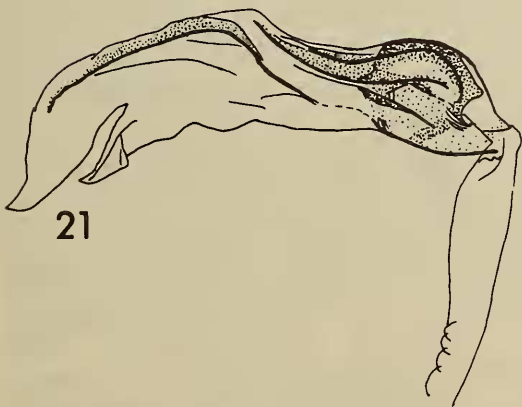
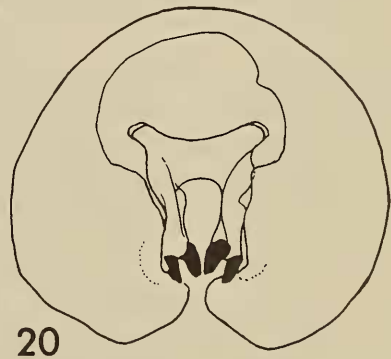
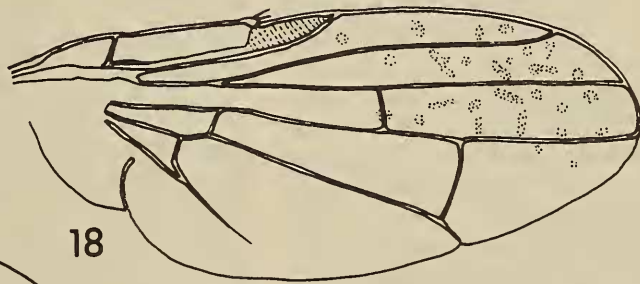
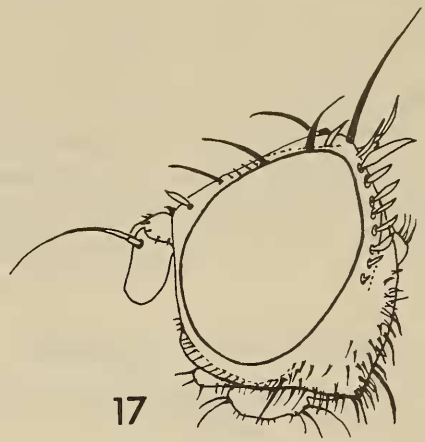
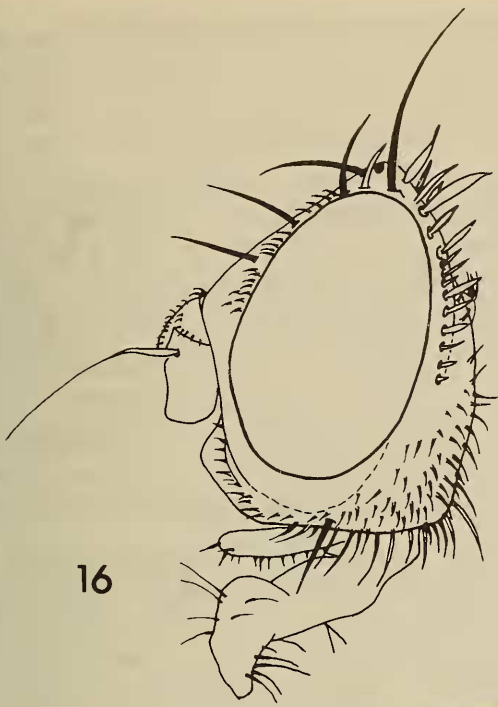
Hyalotephritis complanata (Munro),
new combination

Terellia complanata Munro, 1929: 9, Pl. 1, fig. 4.
"Terellia" *complanata*, Munro, 1967: 16.

This species is known from South- and South West Africa only, and I have examined 1♂ paratype from Hoarlisib Otshu, S. W. A., III.1926, Mus. Exp., as well as 13♂♀ from Njelele R., N. Tvl., Farm "Joan", IX.1939, H. K. Munro (deposited in Plant Protection Research Institute, Pretoria). It differs from the previous species by the characters given in the key. In addition, the aculeus is longer and shaped differently (fig. 15). The head, 9th tergum and aedeagus are illustrated in figs. 11, 10, and 13 respectively.

According to Munro (person. commun.) the species was bred from flower heads of *Conyza dioscoridis*. A puparium,

Figs. 16–22, *Tephritites australis* and *Trupanea xanthochaeta*: 16, *T. australis*, head, lateral view; 17, *T. xanthochaeta*, head, lateral view; 18, *T. australis*, wing; 19, *T. australis*, male, 9th tergum, posterior view; 20, *T. xanthochaeta*, male, 9th tergum, posterior view; 21, *T. australis*, aedeagus; 22, *T. xanthochaeta*, aedeagus.



associated with a female (Shewasaulu, N. Tvl., May 1953, H. K. Munro) was studied. This puparium fits Efflatoun's descriptions and figures (1925 and 1927) for *planiscutellata*, except for the segmentation, which is less demarcated. The surface is distinctly punctate. The distance between the posterior spiracles is 6 times longer than smallest spiracular diameter.

Tephritites Freidberg, new genus

Type-species: *Terellia planiscutellata* var. *australis* Bezzi (= *Terellia australis* Bezzi).

Diagnosis: The genus is distinguished from other tephritine genera by the following combination of character states: Head as in fig. 16; frons slightly longer than wide; frontal stripe bare; fronto-facial angle about 120°–130°; arista bare; proboscis capitate; 2 upper, 2 lower fronto-orbital bristles, the posterior upper bristle white and lanceolate; apical scutellar bristles considerably shorter than half length of basal scutellars; legs: forefemur ventrally at apical $\frac{1}{3}$ or $\frac{1}{2}$ with a row of brown or blackish setulae, in addition to the usual paler bristles; wing as in fig. 18: distance between crossveins as long or longer than dm-cu; wing almost entirely hyaline, with small, pale brown, almost indistinct spots, mainly in cells R₁, R₃, and R₅; terminalia as described for the type-species.

Tephritites is similar and possibly related to *Tephritis*. In *Tephritis*, however, the fronto-facial angle is usually smaller, often about 90°–100°, the apical scutellars are usually more than half as long as basals, the forefemur lacks the row of dark setulae, the distance between the crossveins is usually much shorter than dm-cu and the wing pattern is more extensive. *Tephritis*, well represented in most temperate zones, has been recorded from the Afrotropical Region from only two species, of which one is endemic.

Tephritites australis (Bezzi), new combination

Terellia planiscutellata Becker var. *australis* Bezzi, 1924a: 508, Pl. 14, fig. 55.

Terellia australis Bezzi, 1924b: 118; Munro, 1929: 8. "*Terellia*" *australis*, Munro, 1967: 16.

This species is known from South- and South West Africa only. It was described from several females collected in Pretoria and Barberton. Among other specimens

I examined 1 ♀ in poor condition (Barberton, 17.V.13, H. K. Munro), labeled: "*Terellia planiscutellata* Beck." (Bezzi's handwriting on red paper). This specimen agrees with Bezzi's original description and fixes my concept of the name *australis*. According to Munro (in litt.) it is a syntype, but owing to its poor condition, I am not designating it as a lectotype.

The small spots on the wing are sometimes difficult to detect (compare with Bezzi's figure and description); 9th tergum of male egg-shaped (fig. 19), with the surstyli strongly bent inwardly; aedeagus as in fig. 21; 6th tergum of female with a large shiny black spot, without (or almost without) pollinosity, but often obscured by the dense and coarse pubescence; oviscape as long as combined length of the last 3–4 terga, with a large black spot dorsally at base.

According to Munro (in litt.) the species was bred by W. H. Ghent from *Geigeria passerinoides* (Compositae) (1 ♂, 1 ♀, Vryburg, Nov. 1947). I have also studied 1 ♀ and an associated puparium, reared by Munro from *Geigeria* sp. (Kraalkop, Tvl., 20.III.1928). The puparium is shiny black, finely punctate and striated, and with distinct segmentation; anterior spiracle with 3 or 4 papillae; posterior spiracles closer together than diameter of a spiracle.

Other material studied: *South Africa*: Johannesburg, 10.XII.1927, H. K. Munro (1 ♂); Pretoria, 11.XI.1917, H. K. Munro (1 ♂ ♀), 12.XI.1928, H. K. Munro (1 ♀), 16.XII.1925, H. K. Munro (2 ♂), I.1926, H. K. Munro (1 ♂), 13.II.1972, A. Freidberg (1 ♀); Witdraai BP., X.1925, C. W. Mally (3 ♂ 2 ♀); Bapsfontein TP, 7.XII.1933, H. K. Munro (1 ♀); E. Transvaal, Vaalhoek, 6.II.1972, A. Freidberg (1 ♂). *South West Africa*: Kalahari Gamsbok Natnl. Park, S. Afr. Exp., 16–24.V.1956, Twee Rivieren, H. K. Munro, sweeping *Gaigeria* and *Pituranthos* (1 ♂ ♀); 9 mi S. Rehoboth, 24.X.1968, J. G. Rozen & E. Martinez (2 ♂); Gobabeb, Kuiseb River Bed, 26.I.1978, O. Lomholdt (1 ♀). The specimens are deposited in the Plant Protection Research Institute, Pretoria; Department of Zoology, Tel Aviv University; National

Museum of Natural History, Washington; and Zoologisk Museum, Copenhagen.

Trupanea Schrank

Trupanea Schrank, 1795: 147. Type-species: *Trupanea radiata* Schrank = *Musca stellata* (Fuessly).

The Afrotropical species of this genus were revised by Munro (1964), but the following species was not included.

Trupanea xanthochaeta (Munro), new combination

Terellia xanthochaeta Munro, 1929: 8, Pl. 1, fig. 3.
"Terellia" *xanthochaeta*, Munro, 1967: 16.

I have examined several of the paratypes and a few other specimens from South West Africa, the only country from which this species is known. From the original description the species can easily be placed in *Trupanea* (note the presence of only two scutellar bristles). However, the anterior lower fronto-orbital bristle is whitish and lanceolate, usually differing from the remaining darker and acuminate lower orbitals. In typical *Trupanea* the lower fronto-orbital bristles are concolorous. The shape of the head (fig. 17) and of the 9th tergum of male (fig. 20) are also somewhat different from those of other species. In all other respects, including the aedeagus and its spine (fig. 22), the species fits the concept of *Trupanea*.

Among the studied material were 2♂ 2♀ plus associated flower head and puparia, collected by H. K. Munro (Kachikau, Bechuanaland, 25.V.1954). According to Munro (in litt.) these flies were swarming on the plant, *Pluchea leubniziae* (Compositae). The flower head contains 5 empty puparia, which are shiny black and with distinct stripes of spicules. Each of the anterior spiracles has 3 papillae. Other material studied: Kamanyab and Kaross, S.W.A. (4♂ ♀ paratypes); Letaba KNP. S. Afr., 31.X.1950, H. K. Munro (4♂ ♀) (deposited in Plant Protection Research Institute, Pretoria).

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A Review of the Neotropical Genus *Neotaracia* Foote (Diptera: Tephritidae)

Richard H. Foote

Research Entomologist, Systematic Entomology Laboratory, IIBIII, Sci. & Educ. Admin., U. S. Department of Agriculture. Mail address: % U. S. National Museum NHB 168, Washington, D. C. 20560

ABSTRACT

The neotropical tephritid genus *Neotaracia* Foote is reviewed. Two previously described species, *Neotaracia imox* (Bates) and *N. plaumanni* (Hering) (n. comb.), are redescribed, and their taxonomic characters are compared with a third species, *unimacula*, which is described as new. A key to species, a review of the literature, and illustrations of the critical taxonomic characters are included. No information is available concerning the biology of the 3 species belonging to this genus.

Among specimens of Tephritidae currently present in the U. S. National Museum, two closely related but distinctive species of Tephritinae, originally described in the genus *Acrotaenia* Loew, are represented. Earlier (Foote 1978) I designated one of these species, *imox* Bates, the type-species of a new genus *Neotaracia*, which closely resembles *Acrotaenia* in many respects but differs from that genus mainly in wing pattern. The other species represented in the collection is *plaumanni* Hering, collected mostly at Nova Teutonia from 1950 to 1977 by F. Plaumann, which is trans-

ferred to *Neotaracia* in the present paper. The discovery of a third species from Mexico and San Salvador, described here as new, prompted me to undertake the present review.

Genus *Neotaracia* Foote

Neotaracia Foote 1978: 31. Type-species, *Acrotaenia imox* Bates.

Diagnosis.—Frons bare, 3 pairs lower fronto-orbitals, 2 pairs upper fronto-orbitals, the posterior pair light colored; all setae in postocular row light colored; broad, rounded facial carina present; 1 pair dorsocentrals, situated on or directly behind transverse suture; notopleurals